SOCIO-DEMOGRAPHIC FACTORS, REFERENCE GROUPS, AND THE CAREER ORIEN-
TATIONS, CAREER ASPIRATIONS AND CAREER SATISFACTION OF CANADIAN POLICE OFFICERS

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Research on policing (Preiss and Ehrlich, 1966; Muir, 1977) has noted distinctive differences among police officers in work styles and career orientations. Walsh (1977) described three types of British police officers based on how they adapt to police work and policing as a career. Burke and his colleagues (1984, 1986, 1987, 1988, 1989a, 1989b, 1989c, 1990a, 1990b) adapted Cherniss’ (1980) typology of four kinds of human service professionals to Canadian police officers. Little research has been conducted, however, on how career orientations, policing styles and socio-demographic factors influence officers’ career aspirations and satisfaction with policing as a career.

This study extends previous research on police career orientations with a new typology combining the work of Walsh and Burke’s adaptation of the work of Cherniss. Our survey of Canadian police officers examines the relationship between career orientations and socio-demographic factors, career aspirations and career satisfaction. We also examine changes in attitudes, values and beliefs toward police work over the span of one’s career. First, we review the literature on career orientations and present our analytical framework. Second, we describe our methodology and sample. Finally, we present our results and discuss their implications.

CAREERS IN POLICING: ORIEN-
TATIONS, ASPIRATIONS AND SATISFACTION

The concept of career (Hall, 1976; Schein, 1978) refers to the way individuals develop or change over time given experience. For Hall
work careers have two referents—internal (attitudes, values and needs) and external (job title, job level and salary). Schein (1978) used the term “career anchor” to describe how the development of individual attitudes, values, needs and talents influence future career choices and directions over time. Career anchors enable individuals to make career choices in such a way that the fit between job, organization, and one’s own concept of career is enhanced. Within this framework, changes in self concept or identity are seen as adaptive. DeLong (1982) argued that individuals with different career anchors have different career interests and consequently different work experience and levels of job and career satisfaction.

For Cherniss (1980), career orientation refers to individuals’ goals and interests, needs, values and outlooks concerning their work, perceived job functions, career related aspirations and desired rewards, and even their personal lives. Similar to Schein’s notion of career anchor, career orientation may be seen as the way in which individuals adapt to work given their attitudes, values, needs and talents.

Career aspiration refers to individuals’ career related goals including striving for a particular position or engaging in desired work (Aamodt, 1991). One’s career aspirations may guide one’s career orientation. In our study, career aspiration refers specifically to promotion or desired rank.

Job and career satisfaction refers to the attitudes individuals have toward their job and career (Aamodt, 1991). Needs theory (Maslow, 1954; Aldefer, 1972) states that job and career satisfaction are determined by how well the job or organization is able to satisfy the growth needs, relatedness needs and experience needs of employees (Aldefer, 1972; Wanous and Zwayne, 1977).

Growth needs include the need for recognition and success. Organizations satisfy these needs through praise, awards, promotions, salary increases and publicity, and by providing individuals with the means to reach their potential. Relatedness needs include social needs such as the ability to work with others, developing friendships and feeling needed. Existence needs include basic needs such as food, clothing, shelter and safety. Depending on an individual’s attitudes, values, beliefs, needs and talents, meeting any one or a combination of these needs will provide for a satisfying career.

One of the first efforts to apply a career orientation model to police work was Walsh’s (1977) typology. Walsh distinguished between
three kinds of police officers: Street Cops, Middle Class Mobiles and Action Seekers.

Street Cops are mainly interested in job stability and economic security. They are usually married at the time of recruitment and their job is secondary to their family’s well being. Middle Class Mobiles consider themselves professionals whose main goal is promotion to a higher rank. Action Seekers’ primary concern is “crime control.” Their main goal is to “perform the police role well by doing ‘real’ police work” (Walsh, 1977:151). They are less interested in job security than in finding exciting work and escaping boredom and confinement. Walsh’s model, however, was designed to fit the British situation in the 1970’s. It may not be as appropriate to the North American situation today, particularly in light of technical advances such as the introduction of computers, and social change affecting the situation of racial and ethnic minorities, and women.

Cherniss’ (1980) study of 28 human service professionals identified four career orientations: Self Investors, Social Activists, Careerists and Artisans. Burke’s application of this typology to Canadian police officers, however, neglected some important career concerns, for example, a primary interest in law enforcement. Our study combines the models created by Cherniss and Walsh to provide a typology which is more comprehensive and more appropriate to contemporary North American policing than Burke’s. We identify five career orientations: Self Investors (Street Cops), Careerists (Middle Class Mobiles), Artisans or Specialists, Enforcers (Action Seekers) and Social Activists.

Self Investors are similar to Walsh’s Street Cop. Self Investors are more concerned with their personal lives than with career advancement and challenging work. Their job provides them with a source of economic security and stability. They try to maintain a balance between work and personal life so that job demands do not interfere with family and personal goals and well being.

Careerists consider themselves professionals. Their main goal is promotion and the prestige, respect and financial reward it brings. They believe that they can become good managers and work hard to impress supervisors who control their career advancement. In order to get ahead, they actively seek ways to improve themselves, including higher education. They are interested in credentials and often compare themselves with other candidates when competing for promotion. For them, job success is the best way to fulfil family obligations.

Specialists are primarily interested in doing good work according to their own standards. They value growth, professional development,
challenge and the mastery of new skills over prestige and recognition. Promotion and financial success are less important than interesting work which provides them with a sense of accomplishment. They prefer challenging jobs which require special skills and provide new experiences such as criminal investigation, training, forensics, or identification.

Enforcers, like Specialists, are found in criminal investigations, but have different motives. They seek excitement and an escape from the boredom and confinement that they associate with other occupations. For these officers, police work means gathering evidence and solving crimes by arrest. They derive satisfaction from apprehending criminals and obtaining convictions. Financial security is less important than fighting crime which they consider “real” police work.

Social Activists are characterized by a desire for social and institutional change. They are idealists and visionaries who crusade to change the status quo. Social Activists are more likely to have a broad view of policing including order maintenance and social service. Their main concern is not so much crime control as community service. They view police work more as that of a “helping” profession. Cherniss suggests that Social Activists are not primarily concerned with family life, financial security or promotion.

For some individuals, there may be career orientation overlap. One’s primary career orientation may be associated with a second career orientation. For example, individuals whose primary career orientation is Enforcer, may also have a Careerist slant desiring promotion. Some Self Investors may also have a strong Specialist orientation.

Cherniss (1980) argues that for each career orientation, there is an optimal work setting matching one’s goals, interests, job functions and career aspirations. Individuals whose work setting is less than optimal may be dissatisfied and experience high levels of stress. Ultimately burnout (with its negative consequences on job performance, physical health, emotional well being and social relationships) may be an adaptation to an incongruence between work and career orientation. Cherniss argues that Social Activists are more prone to burnout since their ideals are less likely to match actual experience. Following this reasoning, Burke and Kirchmeyer (1990a, b) suggest that those who enter policing as Social Activists will suffer the most job stress and burnout, and in turn, may resign since their ideals do not match those of day to day police work.
Socialization, Reference Group Theory and Careers

Career orientations are influenced by the relationship between self and reference groups, groups with which one identifies in terms of values, norms and goals. A person’s self emerges as a result of a social process involving both interaction among individuals and prior existence of a group in which the self develops. Reference groups serve as frameworks which enable the self to make comparisons between different groups, individuals and life styles. Ellis (1991:95) notes, “Like all members of distinctive and social professional groups, police undergo a process of ‘socialization’ which is the inculcation of values, attitudes, expectations and role requirements thought necessary for appropriate or effective behaviour as a full fledged group member.” The attitudes, values and beliefs which “form” individual police officers are derived from both current and former reference groups. Type and level of formal education, the influence of family, friends, peers at work or school, teachers, supervisors, information obtained through the media and prior experience with the police may all shape one’s attitudes, values and beliefs (Hyman, 1942; Shibutani, 1968). Buckley (1991) suggests that police officers with differing levels of education may have different and conflicting styles, approaches and goals to police work.

Through socialization, individuals adopt the standpoint of their cultural group as a frame of reference which influences the way in which they perceive the world, think, form judgements and control themselves in everyday life. Since individuals share common attitudes and have common frameworks for defining other persons, themselves and the world around them, they can anticipate the reactions of others and refrain from undesirable behaviour. Individuals will meet their obligations, even in the absence of others, since the perspectives they hold necessarily take into account the expectations of others.

In this context, a reference group “is that whose outlook is used by the actor as a frame of reference in the organization of his [or her] perceptual field” (Shibutani, 1968:132). Reference groups, “arise through the internalization of norms; they constitute the structure of expectations imputed to some audience for whom one organizes his conduct” (Shibutani, 1968:163). Groups with which a person participates directly usually have the greatest influence because identification tends to be strong.

One’s attitudes, values and beliefs concerning the role of the police are subject to change during the course of one’s career. What one’s
initial perception of policing was before training can often differ afterwards. Training, in fact, may serve to alter one’s perspective in order to bring it into line with that shared by the same group. A similar process likely occurs when one has completed training and begins to work as a rookie police officer. The transition from rookie to veteran involves adapting to the perspectives of established officers. This process serves to continuously reproduce a variety of police subcultures and career orientations.

Career orientations are influenced by the length of one’s career and the events that occur during that time. Hughes (1958) and Becker (1961, 1963) have identified the importance of stages in educational and occupational careers as important shapers of attitudes, values, beliefs, identities and lifestyles. In the case of the police, most rookies begin their career in uniformed patrol. They carry with them certain views about police work. As their careers progress, their attitudes toward police work may change from idealism to cynicism and suspicion (Wexler, 1974). There may also be a desire to be promoted or to specialize in certain areas of police work. It is possible that length of service, along with the situations that officers encounter during their careers, may influence the way in which they adapt to police work.

In a study of police officers with up to two years experience, Ellis (1991) found that new recruits (those who had begun police work without completing training) had a different perspective toward policing than did trained recruits (those who had completed training) or experienced constables (those who had between 18 to 24 months of uniform patrol). New recruits tended to desire challenging work whereas experienced constables desired work which balanced out with their personal lives. In addition, new recruits were less likely than trained recruits to value the community service role of the police. Experienced constables, on the other hand, attached little credence to this role. This change in priorities indicates that police officers go through marked changes in their attitudes, values and beliefs during the course of their careers.

McGinnis (1985a, b) has noted that depending on the stage of their careers, police officers hold different attitudes toward advancement. He suggests that recruits tend to be less concerned with promotion than with doing good police work. Later in their careers, the vast majority of officers become more concerned with promotion. Senior officers who desired, but did not get promotion may give up hope as their career draws to a close. Although they may still retain a desire for advancement, they
may place a greater emphasis on job security, personal well being and family.

Figure 1 maps the possible inter-relationships between career orientation, career aspirations, career satisfaction and socio-demographic factors. Socio-demographic factors (e.g. education, marital status, parents’ socio-economic status and occupation), reference groups, and career stage may be directly related to both perceptions of the police role and career aspirations. These three factors may also be indirectly related to one’s career orientation through one’s perception of the police role and one’s career aspirations. One’s career orientation, which takes into account career aspirations, may consequently be related to one’s job and career satisfaction.

Past studies of police careers have primarily focused on specific aspects of the job such as desire for promotion, performance or perceptions of the police role. We postulate that the career orientations of police officers are shaped by past experience and by situational factors associated with length of career. Recruits may enter policing with pre-conceived notions about the job influenced by peers, schooling, parents and the media. After training and gaining experience from their first few years on the job, these officers may come to realize that the conceptions that they held about the job are more idealistic than realistic. They may come to realize that police work does not involve as much crime fighting or community service work as they had envisioned. In response to this, they may adapt to their career through a change of attitudes. In addition, as their careers progress, some police officers may realize that they cannot handle all aspects of the broad spectrum of police work. When this occurs, some officers may wish to specialize.

Depending on their particular skills and knowledge, some police officers may prefer certain kinds of police work such as forensics. Other officers may desire the power and prestige associated with being in management. Those who realize that they do not have the skills or knowledge to enter the specialized or managerial areas may gravitate toward patrol work. Situational pressures may be a factor deciding a police officer’s career orientation. An officer with a wife and children may be more family oriented and more concerned with job security. Officers who find that their involvement in their work creates conflict in their families may experience pressure to shift their career orientation. In summary, the stage of one’s career, along with the situational factors present at that time, may determine one’s career orientation and how one views police work in relation to the rest of one’s life.
METHODOLOGY

A questionnaire survey was sent under the auspices of the Canadian Police College to a random sample of 250 police constables from two mid-sized (600 - 1200 sworn officers) Canadian regional police forces providing both municipal and rural policing. A total of 156 constables completed the questionnaires yielding a 62.4 percent return rate. Force A, a progressive force in a growing community, actively recruits university educated individuals and offers them the potential for advancement. Force B, an older and more established force, has the more conventional attitudes of many Canadian police forces. We intentionally selected these two forces in order to obtain divergent force attitudes.

As well as asking for general background and socio-demographic information, we developed our own instrument, the “Career Attitude Survey” to obtain respondents’ past and present career orientations. After two pre-tests with officers at the Canadian Police College, we concluded that our five types covered the majority of police officers found in Canadian policing today.
We asked respondents to rank order the career orientation descriptions of five police officers according to how closely they applied to themselves (see Note 1 for the career orientation descriptions used in the questionnaire). In addition, participants were asked about their level of career satisfaction and promotion aspirations. Officers’ current career orientations were determined by their first rankings at the “present time.” Perceptions of career orientations upon joining the police were obtained retrospectively.

We have taken the respondents’ recall of initial career orientation to be accurate. However, we have no way of determining the effect of memory recall and caution the reader that it may be contaminated by events which may have occurred between time of joining and the present. The length of time between recruit training and present may be positively correlated to memory recall. In addition, along with other factors, one’s current career orientation may influence one’s perceptions of initial career orientation. Individuals’ current duties or perceptions of police work may also influence how they perceive themselves to have been in the past.

Of course, there may be a difference between an individual’s perceived and actual career orientation due to a perception of some career orientations as more appealing or more negative than others. This may lead certain individuals to cognitively distort their actual career orientation in favour of one they perceive to be more desirable. Some individuals who consider themselves Specialists may actually fit more closely the profile of a Careerist or Self Investor. Some may deny that they are Careerists because they do not want to be seen as “achievers.” Still others may see Self Investors as “losers” or “dead wood.”

Some of those who identify themselves as Self Investors may be “pseudo” Self Investors. These individuals may, in fact, be Careerists who strongly desire promotion but deny being in this orientation because they have become resigned to a Self Investor orientation knowing that promotion opportunities are limited.

Our results, however, show a wide range of career orientations when both initial and present orientations are examined. In addition, when we constructed our typologies, we intentionally tried to make all of the career orientations appear desirable. When we pre-tested our instrument, issues concerning pseudo career orientation, career orientation overlap, and desirability of each typology were addressed. Our pre-test indicated that the effect of these factors would be minimal, if
any. For this reason, it is unlikely that respondents selected an orientation that they did not actually hold simply because they believed it was more desirable.

Unfortunately, some respondents did not respond correctly to the career orientation section of the questionnaire and identified more than one orientation as primary. When this occurred, we treated the data as missing and conducted a discriminant analysis to identify which career orientation best fit each respondent at the present time. This procedure allowed us to identify 86 percent (11) of the missing cases with absolute certainty (see Note 2 for a discussion on methods of handling missing cases).

The respondents ranged in age from 21 to 45 years and had 5 to 14 years of service in their present force. Approximately 90 percent had 15 years of service or less (some had longer service due to prior service in other forces). Forty six percent of the respondents had 6 to 10 years of service while 42 percent had between 11 to 15 years of service. The majority of the respondents were assigned to either patrol (48.3%) or investigations (23.5%). The majority (72%) were 35 years of age or younger. There were 147 males and 7 females. The vast majority (93%) were married.

RESULTS

Socio-demographic Factors

A multivariate analysis of variance found significant differences between the forces on a combination of the dependent variables: age, marital status, sex distribution, level of education and type of duties (F = 8.21, p < .001). Univariate regression analyses using effect coding, however, showed no significant differences between the two forces with respect to sex distribution, marital status, or duties performed (Note: effect coding is a statistical method which allows us to compare two or more groups or categorical means orthogonally). However, when we collapsed respondents’ duties to those involved in patrol work versus all others, we found that Force B had a higher proportion of officers in patrol (58%) than those in Force A (40%), (F = 4.88, p < .029). Sixty percent of
Force A respondents and 42 percent of Force B respondents were engaged in duties other than patrol.

Significant differences were also found in level of education between Force A and Force B (F = 24.01, p < .0001) (consistent with Canadian university policy, a community college diploma was equated to four university credits or just under one year university when determining average level of education for each force). On average, Force A officers had a significantly higher level of education (at least some university) than Force B (2nd year community college). Table 1 shows that Force A had a higher proportion of officers with a university degree (19.05%) than Force B (2.78%) and more officers with at least some university (39.29%) than Force B (22.22%). Similar proportions of Force A officers (23.81%) and Force B officers (26.39%) had at least some community college. More Force B officers (48.61%) had high school education only than did Force A officers (17.68%). Force A respondents indicated that force management encouraged them to obtain a university education more so than those in Force B (F = 33.51, p < .0001).

We also found significant age differences between the two forces. The average age for Force A respondents was 32.1 years while that of

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Force A</th>
<th>Force B</th>
<th>Total</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School only</td>
<td>17.68</td>
<td>48.61</td>
<td>32.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(15)</td>
<td>(35)</td>
<td>(50)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any Community College</td>
<td>23.81</td>
<td>26.39</td>
<td>25.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Including College Diplomas)</td>
<td>(20)</td>
<td>(19)</td>
<td>(39)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some University</td>
<td>39.29</td>
<td>22.22</td>
<td>31.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(33)</td>
<td>(16)</td>
<td>(49)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Degree</td>
<td>19.05</td>
<td>2.78</td>
<td>11.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(16)</td>
<td>(2)</td>
<td>(18)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean Level of Education**</td>
<td>6.8</td>
<td>4.7</td>
<td>5.8</td>
<td>24.01</td>
<td>.0001</td>
</tr>
<tr>
<td></td>
<td>(84)</td>
<td>(72)</td>
<td>(156)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Percentages are column percentages
Raw numbers are shown in parentheses
** 1 = grade 10, 2 = grade 11/12 (junior matriculation), 3 = grade 12/13 (senior matriculation, 4 = 1st year community college, 5 = 2nd year community college, 6.5 - 7.0 = community college diploma/less than one year of university, 8 = 1st year university, 9 = 2nd year university, 10 = Bachelors degree, 11 = Master’s degree, 12 = Doctoral degree.
Force B was 30.2 years ($F = 5.48$, $p < .021$). (Note: we asked for the respondents’ age in five year increments; i.e. 20-24, 25-29, 30-34, etc.; therefore, the resultant ages are only indicative of the actual average age for each force).

**Initial and Present Career Orientations**

We asked respondents to rank order their perceived career orientation upon joining police work. In keeping with earlier studies (Cherniss, 1980; Burke et al., 1984), we took the respondents’ first choice to be their primary career orientation. A Chi$^2$ test conducted to determine whether force differences existed among career orientations found no statistically significant differences between the two forces with respect to perceptions of career orientation upon first becoming a police officer ($\text{Chi}^2 = 3.67$, $p = \text{n.s.}$; see Table 2), although, Force A did have a higher proportion of Specialists and a lower proportion of Enforcers than Force B. The two forces, therefore, were combined in subsequent analyses.

Career orientation on first becoming a police officer is shown in Table 2. Social Activists received the greatest number of first rankings, followed by Enforcers and Specialists. Careerists and Self Investors received the fewest first rankings. In addition, Careerists and Self Investors received the most last rankings (37.4%, $N = 49$ & 31.8%, $N = 118$).

![Table 2](image)

<table>
<thead>
<tr>
<th></th>
<th>Self Investor</th>
<th>Careerist</th>
<th>Specialist</th>
<th>Enforcer</th>
<th>Social Activist</th>
<th>Chi$^2$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Force A</td>
<td>13.89</td>
<td>6.94</td>
<td>26.39</td>
<td>22.22</td>
<td>30.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(10)</td>
<td>(5)</td>
<td>(19)</td>
<td>(16)</td>
<td>(22)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Force B</td>
<td>10.71</td>
<td>8.93</td>
<td>14.29</td>
<td>30.36</td>
<td>35.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6)</td>
<td>(5)</td>
<td>(8)</td>
<td>(17)</td>
<td>(20)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12.4</td>
<td>7.6</td>
<td>21.4</td>
<td>25.4</td>
<td>32.6</td>
<td>3.67</td>
<td>.45</td>
</tr>
<tr>
<td></td>
<td>(16)</td>
<td>(10)</td>
<td>(27)</td>
<td>(33)</td>
<td>(42)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Percentages are row percentages
Raw numbers are shown in parentheses.
Chi$^2$ analysis compares data between Force A and Force B only.
An inspection of the respondents’ present career orientation by force in Table 3 again shows no statistically significant differences in career orientation make-up between the two forces (Chi² = 8.73, p < .068). Considering that the p value does approach significance, however, it is worth pointing out some trends. There seems to be a higher proportion of Careerists in Force A than in Force B. In addition, Force A seems to contain a lower proportion of Enforcers than Force B.

Table 3 also shows the present career orientations for the two forces combined. There is an increase in Self Investors, Careerists and Specialists compared to when respondents first entered police work. Further, there is a decrease in Enforcers and Social Activists at the present time compared to when the respondents first joined. Approximately 29 percent of the respondents indicated that their primary career orientation at the present time was Self Investor, while 21 percent selected Careerist, 27 percent selected Specialist, 12 percent selected Enforcer and 11 percent indicated that their present career orientation was Social Activist. Careerists also received the highest proportion of last rankings (34.6% or over one third of the sample, N = 53) followed by Social Activists (26.1%, N = 40). Specialists again received the fewest last rankings (4.6%, N = 7).

### Table 3

**Respondents’ Present Career Orientation by Force (In Percent)**

<table>
<thead>
<tr>
<th>Force</th>
<th>Self Investor</th>
<th>Careerist</th>
<th>Specialist</th>
<th>Enforcer</th>
<th>Social Activist</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>31.71 (26)</td>
<td>25.61 (21)</td>
<td>28.05 (23)</td>
<td>6.10 (5)</td>
<td>8.54 (7)</td>
</tr>
<tr>
<td>B</td>
<td>25.35 (18)</td>
<td>15.49 (11)</td>
<td>26.76 (19)</td>
<td>19.72 (14)</td>
<td>12.68 (9)</td>
</tr>
<tr>
<td>Total</td>
<td>28.8 (44)</td>
<td>20.9 (32)</td>
<td>27.5 (42)</td>
<td>12.4 (19)</td>
<td>10.5 (16)</td>
</tr>
</tbody>
</table>

**Chi²** = 8.72, **p** = .068

Percentages are row percentages.

Raw numbers are shown in parentheses.

Chi² analysis compares data between Force A and Force B only.
To determine overlap between the career orientations, we examined the inter-correlations between career orientations both when respondents first joined and at the present time. Of the 15 possible career orientation combinations only four had statistically significant correlation coefficients 0.30 or above when the respondents first joined. The Self Investor orientation was negatively correlated with the Enforcer orientation \( r = -0.330, p < .0002 \) and Careerist orientation \( r = -0.346, p < .0001 \). The Social Activist orientation was negatively correlated with the Careerist orientation \( r = -0.317, p < .0004 \) and Specialist orientation \( r = -0.375, p < .0001 \). Only three statistically significant correlation coefficients were found for the combination of career orientations at the present time. The Self Investor orientation was negatively correlated to the Careerist orientation \( r = -0.350, p < .0001 \) and the Enforcer orientation \( r = -0.392, p < .0001 \). The Social Activist orientation was also negatively correlated to the Careerist orientation \( r = -0.477, p < .0001 \). The results suggest that overall, career orientation overlap does not exist for any group, but instead, the more respondents perceive themselves in some categories, the less they perceive themselves in others.

Initial Career Orientation and Socio-demographic Characteristics

We were interested in determining the respondents’ level of education among the various career orientations prior to joining their force in order to compare those who came in with a university degree, those who came in with some university education and those who entered police work with no university education. Although we did not ask this question directly on our survey instrument we did ask those who attended a university the proportion of courses they took while serving as a police officer. We deleted those cases who started their university education only after joining their force. Also, respondents who received more than 75 percent of their university education while serving as a police officer were not included in this analysis. The reason was that we wanted to determine if there was a relationship between level of education and the career orientation that respondents believed that they held before actually commencing a career in policing. We believe that those who had obtained at least 25 percent of their higher education prior to becoming a police officer may have been socialized, in part, into a career orientation by their
university education. Those who started a university education after joining a police force were probably influenced in their career orientation by factors other than university (see Grant, 1984).

A regression analysis found that differences (see Table 4) between the respondents’ initial career orientation and level of education were just below level of significance ($F = 2.41$, $p < .054$). When measured by mean level of education, Specialists and Careerists had the highest level of education (at least some university), followed by Self Investors, Social Activists and Enforcers (approximately 2 years of community college). However, a better representation of one’s level of education vis a vis career orientation may be seen if we compare the proportion of officers with university degrees, those with some university education and those with no university education. Social Activists had the highest proportion of respondents with no university education (78.12%) followed by Enforcers (76.67%). Specialists had the lowest proportion of officers

\[ \text{Table 4} \]

\hspace{10pt} \textbf{RESPONDENTS’ PRIMARY CAREER ORIENTATION UPON JOINING BY FORCE (IN PERCENT)}

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Self Investor</th>
<th>Careerist</th>
<th>Specialist</th>
<th>Enforcer</th>
<th>Social Activist</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
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<td>78.12</td>
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<tr>
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<td>[7.25]</td>
<td>[13.04]</td>
<td>[33.33]</td>
<td>[36.23]</td>
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</tr>
<tr>
<td></td>
<td>(7)</td>
<td>(5)</td>
<td>(9)</td>
<td>(23)</td>
<td>(25)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some University</td>
<td>33.33</td>
<td>11.11</td>
<td>25.00</td>
<td>16.67</td>
<td>6.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[23.53]</td>
<td>[5.88]</td>
<td>[29.41]</td>
<td>[29.41]</td>
<td>[11.76]</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>(4)</td>
<td>(1)</td>
<td>(5)</td>
<td>(5)</td>
<td>(2)</td>
<td></td>
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</tr>
<tr>
<td>University Degree</td>
<td>8.33</td>
<td>33.33</td>
<td>30.00</td>
<td>6.67</td>
<td>15.63</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>[5.88]</td>
<td>[17.65]</td>
<td>[35.29]</td>
<td>[11.76]</td>
<td>[29.41]</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1)</td>
<td>(3)</td>
<td>(6)</td>
<td>(2)</td>
<td>(5)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mean Level of Education* 5.41  6.56  7.05  4.73  4.93  2.41  .054

Numbers without parentheses are column percentages
Numbers in square brackets [ ] are row percentages.
Numbers in standard parentheses ( ) are raw numbers.
* 1 = grade 10, 2 = grade 11/12 (junior matriculation), 3 = grade 12/13 (senior matriculation), 4 = 1st year community college, 5 = 2nd year community college, 6.5-7.0 = community college diploma/less than one year of university, 8 = 1st year university, 10 = Bachelors degree, 11 = Master’s degree, 12 = Doctoral degree.
with no university education and the highest proportion (55%) with at least some university (this includes the some university group + those with a university degree) followed by Careerists (41.66%). However, of those with a university degree, 35.29 percent entered as Specialists, 29.41 percent as Social Activists, 17.65 percent as Careerists, 11.76 percent as Enforcers and 5.88 percent as Self Investors. Combining the “some university” and “university degree” officers together, we find that 32.32 percent enter as Specialists, 20.59 percent as Social Activists, 20.59 percent as Enforcers, 14.71 percent as Self Investors and 11.76 percent as Careerists. On the other hand, only 13.04 percent of those respondents without any university education enter as Specialists, 36.23 percent as Social Activists, 33.33 percent as Enforcers, 10.14 percent as Self Investors and 7.25 percent as Careerists.

Present Career Orientation and Socio-demographic Characteristics

A multivariate analysis of variance was performed on the respondents’ present career orientation and seven socio-demographic variables: respondents’ length of service, marital status, sex, number of children, age, present assignment and level of education. The combined dependent variables were significantly related to the respondents’ present career orientation ($F = 1.51, p < .05$). Univariate regression analyses using a multiple comparison procedure were conducted on the respondents’ present career orientation and the socio-demographic variables. Although no significant differences were found among the five current career orientations on length of service, marital status, sex, number of children or age, there were significant differences among the career orientations with respect to level of education (see Table 5) and present assignment (when grouped into patrol versus other duties; see Table 6). On average, Careerists have a significantly higher level of education than Enforcers, Self Investors and Social Activists. Careerists do not significantly differ from Specialists. Careerists and Specialists have a significantly greater proportion of respondents with at least some university education than Enforcers, Self Investors or Social Activists. Careerists also have the highest proportion of officers with at least some university education (69%). Another notable finding is that Self Investors and Enforcers have a significantly higher proportion of constables in patrol compared to Careerists and Specialists (see Table 6). Also, there is
a higher proportion of Careerists and Specialists in investigations than Social Activists and Self Investors.

**Career Orientation Transitions**

Table 7 shows that a number of officers perceive their career orientation to have changed over time. Of those who stated that they had begun their career as Social Activists, 26 percent now saw themselves as Self Investors and 31 percent saw themselves as Specialists. Only 23.8 percent of those who stated that they had begun as Social Activists remained in that career orientation. In fact, of those who are presently Social Activists, only one indicated not being a Social Activist at the beginning.
of their career. Only 9.1 percent of those who believed that they had begun as Enforcers remained Enforcers. Almost half (45.5%) stated that they had changed from Enforcer to Self Investor. Two thirds of the officers who presently make up the Self Investor group said that they originally saw themselves as Enforcers or Social Activists.

Over half those officers who reported that they had started out as Specialists, remained Specialists (51.9%). Almost one third (29.6%) of those who reported that they had begun as Specialists now consider themselves Careerists. One third of those who reported that they had begun as Careerists now saw themselves as Self Investors while half of

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Self Investor</th>
<th>Careerist</th>
<th>Specialist</th>
<th>Enforcer</th>
<th>Social Activist</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patrol (A)</td>
<td>66.67 (28)</td>
<td>32.26 (10)</td>
<td>32.50 (13)</td>
<td>64.71 (11)</td>
<td>50.00 (8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration (B)</td>
<td>11.90 (5)</td>
<td>6.45 (2)</td>
<td>17.50 (7)</td>
<td>0.00 (0)</td>
<td>12.50 (2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investigations (C)</td>
<td>7.14 (3)</td>
<td>38.71 (12)</td>
<td>30.00 (12)</td>
<td>29.41 (5)</td>
<td>(18.75) (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical (E)</td>
<td>4.76 (2)</td>
<td>3.23 (1)</td>
<td>5.00 (2)</td>
<td>0.00 (0)</td>
<td>0.00 (0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Youth Bureau (F)</td>
<td>4.76 (2)</td>
<td>3.23 (1)</td>
<td>2.50 (1)</td>
<td>0.00 (0)</td>
<td>0.00 (0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other duties (G)</td>
<td>4.76 (2)</td>
<td>16.13 (5)</td>
<td>12.50 (5)</td>
<td>5.88 (1)</td>
<td>18.75 (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (B-G)</td>
<td>33.33 (14)</td>
<td>67.74 (21)</td>
<td>67.50 (27)</td>
<td>35.29 (6)</td>
<td>50.00 (8)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mean Coded Value* 0.333a –0.355b –0.350b 0.294a 0.000ab 3.95 .004

Means with the same or no superscripts do not significantly differ.
those who stated that they had started as Self Investors, still consider themselves to be such. Also Table 8 shows that a large proportion of those who saw themselves presently as Careerists reported that they had begun as either Specialists (27.6%), Enforcers (27.6%) or Social Activists (20.7%).

**Present Career Orientation and Desires and Expectations Regarding Promotion**

To determine if career orientations in the two forces differed in terms of promotion related variables, we conducted a two by five (force by career orientation) multivariate analysis of variance on various measures of desires and expectations with respect to promotion. The combined dependent variables were significantly affected by career orientation ($F = 2.06, p < .001$) but not by force ($F = .731, p = n.s.$) nor by their interaction ($F = .882, p = n.s.$). Our findings were as follows: 1) Across all career orientations, respondents generally desired promotion to the next rank to some extent. Careerists had a significantly greater

<table>
<thead>
<tr>
<th>Initial Career Orientation</th>
<th>Percentage of Respondents by their Present Career Orientation</th>
<th>Self Investor</th>
<th>Careerist</th>
<th>Specialist</th>
<th>Enforcer</th>
<th>Social Activist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Investor (N=14)</td>
<td></td>
<td>50.00</td>
<td>21.4</td>
<td>7.1</td>
<td>21.4</td>
<td>0.0</td>
</tr>
<tr>
<td>Careerist (N=9)</td>
<td></td>
<td>33.3</td>
<td>33.3</td>
<td>22.2</td>
<td>11.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Specialist (N=27)</td>
<td></td>
<td>11.1</td>
<td>29.6</td>
<td>51.9</td>
<td>7.4</td>
<td>0.0</td>
</tr>
<tr>
<td>Enforcer (N=33)</td>
<td></td>
<td>45.5</td>
<td>24.2</td>
<td>21.2</td>
<td>9.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Social Activist (N=42)</td>
<td></td>
<td>26.2</td>
<td>14.3</td>
<td>31.10</td>
<td>4.8</td>
<td>23.8</td>
</tr>
</tbody>
</table>

Percentages are row percentages. Raw numbers are shown in parentheses.
desire for promotion than Self Investors, Social Activists or Specialists (F = 9.69, p < .0001). Careerists did not, however, significantly differ from Enforcers. 2) Careerists believed they were most deserving of promotion followed by Enforcers, Specialists, Self Investors and Social Activists (F = 3.04, P < .019). 3) Careerists and Enforcers had the highest aspirations for promotion (to staff inspector), followed by Specialists (inspector), Self Investors and Social Activists (staff sergeant) (F = 4.86, p < .001). 4) Although level of significance was not reached, Enforcers had a higher expectancy of reaching their desired rank than the other four career orientations. 5) Careerists and Enforcers expected to retire at a higher rank (staff sergeant to inspector) than Self Investors or Social Activists (sergeant) (F = 4.69, p < .001). 6) Across all career orientations, there was a belief that there was between 8 to 9 years of eligibility for promotion before one reached a stage of being “passed over.” 7) Careerists and Enforcers had the highest expectancy of being promoted to the next rank (F = 4.53, p < .002). 8) Careerists and Enforcers had a higher expectancy that their qualifications for promotion would eventually pay off (F = 5.13, p < .0007).

<table>
<thead>
<tr>
<th>Present Career Orientation</th>
<th>Percentage of Respondents by Their Initial Career Orientation</th>
<th>Social Activist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Investor</td>
<td>17.9</td>
<td>7.7</td>
</tr>
<tr>
<td>(N=39)</td>
<td>(7)</td>
<td>(3)</td>
</tr>
<tr>
<td>Careerist</td>
<td>13.8</td>
<td>10.3</td>
</tr>
<tr>
<td>(N=29)</td>
<td>(4)</td>
<td>(3)</td>
</tr>
<tr>
<td>Specialist</td>
<td>2.7</td>
<td>5.4</td>
</tr>
<tr>
<td>(N=37)</td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Enforcer</td>
<td>27.3</td>
<td>9.1</td>
</tr>
<tr>
<td>(N=11)</td>
<td>(3)</td>
<td>(1)</td>
</tr>
<tr>
<td>Social Activist</td>
<td>9.1</td>
<td>0.0</td>
</tr>
<tr>
<td>(N=11)</td>
<td>(1)</td>
<td>(0)</td>
</tr>
</tbody>
</table>

Percentages are row percentages.
Raw numbers are shown in parentheses.
### Table 9

**Breakdown of Career Orientation Transition Patterns – From Present to Initial Career Orientation (In Percent)**

<table>
<thead>
<tr>
<th>Promotion variable</th>
<th>Self Investor (43)*</th>
<th>Careerist (31)</th>
<th>Specialist (42)</th>
<th>Enforcer (15)</th>
<th>Social Activist (11)</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desire Promotion¹</td>
<td>3.52&lt;sup&gt;c&lt;/sup&gt;</td>
<td>4.59&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.91&lt;sup&gt;bc&lt;/sup&gt;</td>
<td>4.37&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>3.50&lt;sup&gt;c&lt;/sup&gt;</td>
<td>9.69</td>
<td>.0001</td>
</tr>
<tr>
<td>Deserve Promotion²</td>
<td>3.09&lt;sup&gt;b&lt;/sup&gt;</td>
<td>3.75&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.31&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>3.37&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>2.88&lt;sup&gt;b&lt;/sup&gt;</td>
<td>3.04</td>
<td>.019</td>
</tr>
<tr>
<td>Desired Rank³</td>
<td>3.55&lt;sup&gt;b&lt;/sup&gt;</td>
<td>4.99&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.38&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>4.84&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.44&lt;sup&gt;b&lt;/sup&gt;</td>
<td>4.86</td>
<td>.001</td>
</tr>
</tbody>
</table>

**Probability of Reaching Desired Rank (In Percent)**

|                      | 35.46 | 39.38 | 31.90 | 52.64 | 40.00 | 1.93 | n.s. |

**Expected Retirement Rank³**

|                      | 2.43<sup>b</sup> | 3.50<sup>a</sup> | 2.91<sup>ab</sup> | 3.26<sup>a</sup> | 2.25<sup>b</sup> | 4.69 | .001  |

**Promotable years**

|                      | 8.36  | 9.50  | 8.98  | 7.47  | 9.38  | 0.55 | n.s.  |

**Probability of Reaching Next Rank (In Percent)**

|                      | 47.28<sup>b</sup> | 67.5<sup>a</sup> | 51.42<sup>ab</sup> | 65.26<sup>a</sup> | 37.50<sup>b</sup> | 4.53 | .002  |

**Promotion Qualifications Will Pay Off<sup>d</sup>**

|                      | 3.26<sup>b</sup> | 4.09<sup>a</sup> | 3.61<sup>ab</sup> | 4.00<sup>a</sup> | 3.27<sup>b</sup> | 5.13 | .0007 |

Measures the same or no superscript do not significantly differ.

1. 1 = No Desire (for promotion), 2 = Little Desire, 3 = Some Desire, 4 = Great Desire, 5 = Very Great Desire.
2. 1 = To No Extent, 2 = To a Little Extent, 3 = To Some Extent, 4 = To a Great Extent, 5 = To a Very Great Extent.
3. 1 = Constable, 2 = Sergeant, 3 = Staff Sergeant, 4 = Inspector, 5 = Staff Inspector, 6 = Superintendent, 7 = Deputy Chief, 8 = Chief.
4. 1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree/Disagree, 4 = Agree, 5 = Strongly Agree.
5. Sample size may vary slightly due to non-response.
Education as a Qualification for Promotion to Various Ranks

A two by five (force by career orientation) multivariate analysis of variance was conducted on the respondents’ beliefs about the value of education for promotion to various ranks. Significant differences were not found on either of the main effects or the force by career orientation interaction. However, earlier research by Buckley, McGinnis and Petrunik (1993) noted that the majority of constables, despite their level of education want to be promoted to at least sergeant. Given that there were significant differences in level of education among the career orientations, we performed a series of univariate regression analyses for each rank to determine whether the different career orientations valued education equally or differently as a promotion factor. Table 10 shows that significant differences exist by group for promotion to the ranks of corporal ($F = 2.49, p < .05$) and sergeant ($F = 4.27, p < .003$). Social Activists gave the greatest value to education for both the sergeant and corporal ranks followed by Careerists and Specialists. Enforcers and Self

<table>
<thead>
<tr>
<th>Promotion variable</th>
<th>Self Investor (43)*</th>
<th>Careerist (31)</th>
<th>Specialist (42)</th>
<th>Enforcer (15)</th>
<th>Social Activist (11)</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporal</td>
<td>1.48&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1.97&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>1.88&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>1.59&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>2.07&lt;sup&gt;a&lt;/sup&gt;</td>
<td>2.49</td>
<td>.0456</td>
</tr>
<tr>
<td>Sergeant</td>
<td>1.57&lt;sup&gt;b&lt;/sup&gt;</td>
<td>2.17&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>2.05&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>1.68&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>2.31&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.27</td>
<td>.0027</td>
</tr>
<tr>
<td>Staff Sergeant</td>
<td>2.05</td>
<td>2.47</td>
<td>2.37</td>
<td>2.21</td>
<td>2.50</td>
<td>1.57</td>
<td>n.s.</td>
</tr>
<tr>
<td>Inspector</td>
<td>2.61</td>
<td>3.09</td>
<td>2.95</td>
<td>2.68</td>
<td>3.19</td>
<td>1.96</td>
<td>n.s.</td>
</tr>
<tr>
<td>Superintendent</td>
<td>3.14</td>
<td>3.95</td>
<td>3.15</td>
<td>3.11</td>
<td>3.56</td>
<td>1.44</td>
<td>n.s.</td>
</tr>
<tr>
<td>Deputy Chief</td>
<td>3.55</td>
<td>4.09</td>
<td>3.59</td>
<td>3.63</td>
<td>4.06</td>
<td>1.59</td>
<td>n.s.</td>
</tr>
<tr>
<td>Chief</td>
<td>3.64</td>
<td>4.19</td>
<td>3.76</td>
<td>3.76</td>
<td>8.19</td>
<td>1.41</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

Means with the same or no superscript do not significantly differ.

1. 1 = To No Extent, 2 = To a Little Extent, 3 = To Some Extent, 4 = To a Great Extent, 5 = To a Very Great Extent.
Investors gave the least value. Across all groups, greater weight was given to education for promotion to each successive rank.

We asked respondents who took university courses while serving as police officers their motivation for doing so. Although level of significance was not reached ($F = 2.63, p < .06$), Careerists indicated to a greater extent than the other respondents that they enrolled in university courses for promotion credit. Enforcers indicated that they did not enrol in university to increase their chance for promotion. In addition, a higher proportion of Careerists (61.3%) enrolled in university courses after joining their force than Enforcers (26.6%), Specialists (26.2%) or Self Investors (16.2%). None of the Social Activists enrolled in university courses after becoming a police officer.

**Career Orientation and Job and Career Satisfaction**

A two by five multivariate analysis of variance found no significant differences among the different career orientations, the two forces or the force by career orientation interaction. Across all career orientations, the respondents indicated a high level of career and job satisfaction. Overall, the respondents had little or no doubts concerning their decision to join policing and reported that their careers were fulfilling and rewarding.

**Career Orientation and Patterns among a Combination of Predictor Variables**

To determine specific patterns among the various predictors used in this study, we selected variables that significantly differentiated between the career orientations from previous analyses and performed a discriminant function analysis. Discriminant analysis helps make sense of a large number of variables by taking into consideration inter-correlations among predictors and examining the relationship among them in order to predict or discriminate between groups. We determine the factor holding the greatest discriminatory power for group separation by looking at the structure matrix. The structure matrix takes into account inter-correlations among variables which may affect the size and direction of the coefficients. The structure matrix, therefore, maximally differentiates the groups and we use it to determine the importance of each variable. Nine predictors were selected from the previous analyses: desire for promotion (to the next rank - sergeant), the probability of reaching the next rank (sergeant), (the extent to which respondents
believed they) deserve promotion, the respondents’ desired rank, the respondents’ expected retirement rank, (the belief that the respondents’) promotion qualifications will pay off, respondents’ level of education, respondents’ present assignment (patrol versus all other duties) and the value they believe should be given to education for promotion to sergeant.

Table 11 shows that four discriminant functions were calculated with a combined \( \chi^2 = 93.79, p < .0001 \). After removal of the first

### Table 11

**RESULTS OF DISCRIMINANT FUNCTION ANALYSIS OF VARIOUS PREDICTOR VARIABLES ON CAREER ORIENTATION**

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Standardized Discriminant Function Structure Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Function 1</td>
</tr>
<tr>
<td>Desire Promotion</td>
<td>.76625</td>
</tr>
<tr>
<td>Deserve Promotion</td>
<td>.42753</td>
</tr>
<tr>
<td>Desired Rank</td>
<td>.49201</td>
</tr>
<tr>
<td>Expected Retirement Rank</td>
<td>.51158</td>
</tr>
<tr>
<td>Probability of Reaching Next Rank</td>
<td>.46108</td>
</tr>
<tr>
<td>Promotion Qualifications Will Pay Off</td>
<td>.56134</td>
</tr>
<tr>
<td>Value Given to Education for Promotion to Sergeant</td>
<td>.24965</td>
</tr>
<tr>
<td>Level of Education</td>
<td>.53388</td>
</tr>
<tr>
<td>Present Assignment</td>
<td>–.36891</td>
</tr>
</tbody>
</table>

| Canonical R                                             | .56  | .39  | .36  | .15  |
| Eigenvalue                                              | .45  | .18  | .14  | .02  |
| \( \chi^2 \)                                            | 93.79| 43.64| 21.32| 3.03 |
| Sig. Level                                              | .00001| .0084| .0937| .8045|
function, there was still a strong association between the groups and the predictors ($\text{Chi}^2 = 43.64, p < .001$). When the second function was removed, the association between the groups and the predictors were no longer significant ($\text{Chi}^2 = 21.32, p < .094$). Therefore, the first two discriminant functions effectively discriminate between the five career orientations. However, the canonical correlation for the third discriminant function is sufficiently strong (.36) that the pattern in this function may be worth noting. The first two discriminant functions accounted for 56.4 and 22.5 percent of the between groups variability.

In the first discriminant function, almost all the variables except for “value given to education for promotion to sergeant” were strong predictors for group membership (anything over .30 is considered sufficiently strong to be a predictor for a specific function). This function is primarily a career aspiration function. Specifically, we see that those who desire promotion to the next rank believe that their promotion qualifications will pay off, believe that they deserve to be promoted, have a higher expected retirement and desired rank and believe that they have a good possibility of reaching the next rank. Those who display these beliefs are better educated and tend to engage in duties other than patrol. Figure 2 which situates each career orientation on a territorial map illustrates how this function works. The first discriminant function (represented by the horizontal axis of the map) effectively separates Careerists from Self Investors and Social Activists grouped together. Careerists (located on the positive side of the horizontal axis of the territorial map) tend to be better educated, are engaged in duties other than patrol (e.g. investigations), have the strongest desire for promotion, believe that they are the most deserving of promotion, have higher career aspirations and believe that they are well qualified for promotion. On the other hand, Self Investors and Social Activists (located on the negative side of the horizontal axis of the territorial map) are lesser educated, are more likely to be in patrol, have lower career aspirations and feel less deserving of promotion. Both Enforcers and Specialists fall between Self Investors and Social Activists, and Careerists. Enforcers and Specialists indicated a higher desire for promotion and have higher career aspirations than Self Investors and Social Activists. However, their career aspirations are lower than those of Careerists.

The second discriminant function from Table 11 can be described as a “present assignment” function. Respondents who are primarily in
patrol, believe to some extent that they will be promoted to sergeant and give less value to education as a means of promotion. Figure 2 shows how this function works. The second discriminant function (represented by the vertical axis) maximally separates Enforcers and Self Investors as one group, Careerists and Specialists as another group and Social Activists as a third group. Enforcers and Self Investors are more likely to be in patrol. They are lesser educated and do not give credence to education for promotion to sergeant. Alternatively, Social Activists, who in general are lesser educated, value education for promotion to sergeant and are found equally in both patrol and other duties. However, Self Investors and especially Enforcers, desire promotion to a greater extent than Social Activists. Specialists and Careerists, who are better educated and are
typically engaged in duties other than patrol, give more value to
education as a requirement for promotion.

The third discriminant function identifies individuals who are
lesser educated, who value education as a means of promotion to sergeant
and who believe that their qualifications for promotion will pay off. This
function may be separating the Social Activists from the other four career
orientations. Social Activists believe to some extent that their promotion
qualifications will pay off and despite their lower level of education,
maintain that education is relevant as a promotion qualification to
sergeant. Alternatively, this function may be identifying individuals who
are better educated, who do not value education for promotion to sergeant
and do not believe that their promotion qualifications will pay off. This
function may be describing educated Self Investors who were once
Careerists. These individuals now believe that, despite their education,
their chances for promotion are slim. They have adapted by identifying
with other Self Investors who also place little value on education for
promotion to sergeant.

Discriminant analysis enabled us to distinguish patterns and
relationships among the various career orientations. Overall, we found
that Self Investors are primarily in patrol, have a lower level of education
and have lower career aspirations. Their positioning on the territorial map
suggests that they still retain some desire for promotion despite their
belief that education should not be a promotion consideration to sergeant.
Social Activists waver between patrol and other duties. Their positioning
on the territorial map indicates that they do not have very high career
aspirations. Still, more so than Self Investors, they value education as a
factor for promotion to sergeant. Although, on average, they have a lower
level of education, it is possible that they have been socialized to believe
that education is beneficial for police work. Enforcers have higher career
aspirations and strongly believe that they will be promoted regardless of
their qualifications. They tend to be lesser educated and mostly in patrol.
Like Self Investors, they do not believe that education should be a
requirement for promotion to sergeant. Careerists have the highest career
aspirations, the highest promotion expectancies, are better educated and
typically not in patrol. They place high value on education for promotion
to sergeant.
DISCUSSION

Career Orientation, Socialization and Socio-demographic Factors

Career Orientation is less a reflection of personality type than an adaptation to changing life circumstances including the stage of one’s career and one’s exposure to and identification with different reference groups. Police officers may change career orientations as their life circumstances change. Our study shows that a number of officers perceive their career orientation to have changed over time.

Consistent with the findings of Burke and his colleagues some Social Activists may have experienced burnout following the realization that the helping role that they had adopted involved dealing with factors beyond their control. Their quest to bring about social change may have been long and frustrating. Perhaps their inability to bring about desired changes motivated Social Activists to change career orientations. Similarly, Enforcers may have become frustrated and discouraged in their attempts at fighting crime. Like Social Activists, Enforcers may have adapted by changing their career priorities, and as a result, their career orientation. This notion is consistent with research on health care professionals. Davis (1968) found that most nursing students entered their job with an idealistic notion of helping and caring for the sick. However, after some time, they found that the reality of their job was not what they had expected. Because of the pragmatic demands of performing administrative duties and dispensing medicine, they found themselves less able to spend time comforting and consoling patients and meet their primary goal of treating patients on a human level. Since nursing was no longer the career they envisioned, they became disappointed, frustrated and cynical. They began to adapt to the demands of the nursing profession by taking on less idealistic and more realistic attitudes. Similarly, Becker (1961, 1963) reported that medical students entered their job with idealistic notions toward medicine. Many, however, eventually found that these ideals were often not relevant or applicable to their job and they became more pragmatic. A few did retain their idealistic values with the realization that they could not always practice them as fully as they would like.

As well as adapting to situational circumstances, some Social Activists and Enforcers may have adopted new reference groups which influenced their career orientation through socialization. Depending on their reference group, the career orientation that an individual prefers may vary. Those valuing prestige and promotion may shift to a Careerist
orientation. Those valuing specialized work may shift to a Specialist orientation. Those who do not believe they have the qualifications to become Careerists or Specialists, or are unwilling to make the effort, may instead identify with Self Investors. Alternatively, some Social Activists and Enforcers may not have been able to re-adjust and consequently resigned. We do not have data on those who have left policing. A study on the career orientation of leavers could shed light on these issues.

It is not only Social Activists and Enforcers who re-orient their careers. Careerists who perceive a poor chance for promotion may become Self Investors or Specialists. A large proportion of Enforcers became Self Investors (46%). Most of those who joined as Specialists remain Specialists (52%); they appear content with their career choice possibly because they had previously adopted realistic demands according to their education and skills. Many Enforcers and Social Activists, however, may not have joined policing with realistic expectations. Interestingly, many of the latter became Specialists. The findings again support our suggestion that career orientations are not necessarily stable, but rather, may change depending on the situations one encounters and one’s reference groups.

Our study provides evidence that when job expectations are not realized, individuals will adjust their attitudes, values and beliefs toward the job. Recruits who enter police work with a perspective learned from exposure to the media, advertising, or police recruiting efforts may, once they become integrated into the role of “police officer”, shift their views of police work in response to their current work and family circumstances.

Socio-demographic differences between Force A and Force B may explain some of the career orientation transitions. Force A officers were generally better educated, slightly older (probably because there were more university educated individuals in the force who joined at an older age), had a higher proportion of officers who considered themselves Careerists and a lower proportion of officers who considered themselves Enforcers. Upon joining, recruits in both forces were primarily either Social Activists or Enforcers, with some joining as Specialists – primarily in Force A. Of the university graduates, a higher proportion joined as Specialists which suggests that the higher proportion of Specialists in Force A upon joining can be explained by the higher proportion of university graduates in that force. Those with a university degree may tend to adopt this orientation with the expectation of specialized work such as forensics.
The higher proportion of Careerists and lower proportion of Enforcers presently in Force A may again be a function of level of education. Individuals’ career priorities may be affected by formal education. Careerists, in general, are better educated than Enforcers. Those who are better educated may have been socialized into desiring management positions and believing that they deserve them. Those with little or no exposure to a university environment may have been socialized through other influences to value “crime fighting.” Therefore, depending on one’s level of education, individuals may adopt a specific career orientation as their careers progress. Also, our data show that Force B has more individuals in patrol than does Force A. This indicates that the two forces may have different operational priorities. This again may influence the career orientation of individuals who make their priorities in the best interest of their community. In addition, Force A was expanding and offering applicants the possibility for advancement which likely increased hope for individual advancement. This suggests that force culture and philosophy strongly influences career orientation. Studies on the effect of institutions toward political affiliation support this interpretation. Newcomb (1958) found that many students who entered college from very conservative backgrounds became liberalized by their experience at college. These students adopted the college as their reference group, while those remaining conservative, continued to make pre-college relationships a reference point. Similarly, those who enter a certain police force may identify with and be influenced by that force’s culture and attitudes.

**Career Orientation and Career Aspirations**

Contrary to the expectation that Careerists would aspire to a higher ultimate rank than those of other career orientations, Careerists did not significantly differ from Specialists or Enforcers. While Careerists may desire promotion to management for recognition and prestige, Enforcers and Specialists may desire promotion for different reasons. Promotion may be the only path of entry into a particular kind of work. Enforcers desiring investigative work may be required to become detectives which are sergeant level jobs. They may eventually wish to run a section or a division and lead investigations requiring a higher rank (e.g. inspector). Similarly, Specialists may desire promotion because entry into a specialized field often requires a higher rank.

The lower level of education of Enforcers could explain why they do not perceive education as valuable for promotion to sergeant when
compared to Careerists, who are overall better educated. Buckley (1991) and Buckley et al. (1993) found that lesser educated officers tend to believe that education provides no additional perspective to police work. They considered education to be less important for promotion than performance appraisals, seniority and experience. Therefore, should non-university educated Enforcers remain stagnant and observe junior, less experienced university graduates obtain promotion, the non-university educated Enforcers may perceive the system to be unfair and become discontent. Buckley et al. (1993) suggests that in order to compensate for lack of advancement and recognition, these officers may leave the field or more likely, lower productivity and identify with Self Investors.

Self Investors also desired promotion and career advancement but are less prepared than other officers to dedicate additional time and effort to strive for promotion. Self Investors may recognize that their qualifications for promotion are below those of others, but this does not mean that they do not desire advancement. What it does suggest is that Self Investors have adapted to their current situation and have lowered their career expectations, while not abandoning all hopes for promotion. To compensate for this, Self Investors have shifted priorities from career to family and personal life. Although a desire for promotion may still remain, career advancement becomes secondary. If promotion becomes available, they will accept it; if it does not, they have adapted themselves in such a way that disappointment is less than it would be for Careerists or other officers who deemed promotion essential for a fulfilling career.

Social Activists are similar to Self Investors in their desire for promotion and have also come to believe that their perceived qualifications for promotion will not help them advance. Social Activists recognize more than Self Investors university education as a valuable qualification for promotion to sergeant. This may be an adaptive response. Through socialization, Social Activists may have noticed that a university education is a valuable asset because it gives a broader and more holistic perspective toward the police role. This perception is consistent with research (Worden, 1990; Trojanowicz and Nicholson, 1976) showing that better educated officers see their job from a wider viewpoint than strict crime control. The high level of career satisfaction displayed by Social Activists, therefore, may simply reflect their adjustment to the limitations of their work. This is contrary to the findings of Burke and his colleagues (1984, 1987, 1988, 1989a, 1989c, 1990a, 1990b) that Self Investors and Social Activists have low levels of career satisfaction.
Careerists strongly believe that their promotion qualifications will pay off. Our results show that a high proportion of Careerists are university educated. If universities are seen as a reference group promoting achievement and “getting ahead,” this may explain why a high proportion of university educated officers are Careerists. Those with a university education may believe that their education should and will help them advance while those without may believe that other qualifications such as seniority, experience or outstanding performance appraisals should help them advance. Given that a higher proportion of Careerists than Enforcers were inclined to upgrade their education for promotion credit, it would seem that at least some Careerists are more willing to put in extra time and effort outside of working hours to enhance their qualifications and increase their chance for promotion. Enforcers and Careerists who do not upgrade their education, on the other hand, may be relying solely on job related factors such as seniority and performance and may be less willing to put in personal time for what they consider non-job related investments. They may not see education as being in their best self interests.

The high proportion of Careerists in investigations makes sense given that investigations is a major avenue of upward mobility where sergeant level positions are concentrated. Specialists, on the other hand, are in investigations because this is their preferred line of work. In addition, Specialists may have a higher level of education because this is an avenue to get into the work they prefer such as identification. For Specialists, education may be the vehicle required to gain entry into a particular or specialized type of work. They do not obtain education necessarily as a tool for promotion. If Careerists believe they are not being rewarded for their perceived qualifications, they may feel that the promotion system is inequitable and, like unpromoted Enforcers, try to compensate for this inequity. Self Investors, despite their qualifications, believe that their qualifications are not as likely to pay off. Recognizing that their perceived qualifications are low, they have lowered their expectations. This may preclude feelings of resentment and help them adjust to the prospect of spending many more years as a constable before retiring.

**Career Orientation and Career Satisfaction**

Those of different career orientations showed little differences in career satisfaction. While respondents, on average, expressed high career satisfaction, the reasons for this may vary according to career orientation.
Few respondents indicated they were Self Investors when they first entered police work, a career orientation Burke and his colleagues (1984, 1987, 1988, 1989a, 1989c, 1990a, 1990b) found to have a low level of career satisfaction. In our study, Self Investors were the most frequently occurring type. Although they had lower expectations toward promotion than other orientations, they were still satisfied with policing as a career. This high level of career satisfaction found among Self Investors may be due to the relative youth of our sample as a whole. Despite believing that their prospects for promotion as being lower than Careerists and Enforcers, most Self Investors are young and still believe that promotion in the future is possible. This retention of hope for promotion may possibly temper feelings of dissatisfaction (Olson, 1986; Rogers, 1991).

Although Burke et al. (1984) and Burke (1989a) found that increased age or seniority were related to decreased career satisfaction for Self Investors, McGinnis (1991) found that length of service was not related to career satisfaction for a full range of Canadian municipal police officers.

Burke (1989a) found that officers who believed they had little hope for further advancement were mostly Self Investors. These “plateaued” officers were less satisfied with their jobs and career. Burke found, however, that although they perceived more stress and a more negative work setting, these negative experiences did not affect their physical or psychological well being. Burke and Kirchmeyer (1990a, b) found that Self Investors had low levels of work commitment and saw police work simply as a way to earn a living. Self Investors, however, made sure that their jobs did not interfere with home, family life and time off. Therefore, although Self Investors indicated low levels of career satisfaction, they seem to have satisfying personal lives outside of work. Possibly, the low commitment to work of Self Investors shielded them from exhibiting negative reactions to their overall health and well being. Similar findings have been reported in the general career literature by Near (1985) and Viega (1981) indicating that plateaued individuals adapt or cope with the consequences of their career so that there is little or no adverse effect on their personal well being.

Other factors which may explain the high level of career satisfaction found in this study are identification with reference groups and the re-adaptation process that may occur during one’s career. Those who began as Social Activists and Enforcers who became disillusioned with what they could accomplish in police work may have changed priorities from work to family, personal interests and financial security. Those who began as Careerists, primarily interested in career
development and advancement, who came to recognize that promotion was out of reach, may have adopted a reference group more closely resembling themselves. Reference group theory would suggest that these individuals would note similarities in their qualifications for promotion and come to identify with Self Investors. As a result of this process, they believe that the outcomes received for their perceived qualifications are equitable. Adapting to these lower expectations, they become satisfied with their careers. Their job becomes a source of financial security while they centre their interests on family and personal well being. Rogers (1991) found similar results on college educated correctional officers who desired promotion.

Those presently identified as Careerists may display high career satisfaction because they still believe that their chances for promotion are high given that they have a number of years ahead of them in which they will be considered promotable. They have not yet reached the stage in their careers (90% of the sample had 15 years or less of service) where they feel that promotion opportunities are numbered. They have not faced disappointment with their careers and their optimistic outlook accounts for their level of career satisfaction.

Specialists tend to be content with their careers. They are either already in the line of work they desire or they expect that they will be in the future. Cherniss (1980) suggests that Specialists experience well being because they better fit their work setting. The same may be true for Careerists. Those who are Social Activists or Enforcers may have adapted to the limitations of their work to the extent that they feel able to accomplish their mission of helping others or fighting crime. With such perceived accomplishments, they may be reasonably satisfied with their jobs and the future their career holds for them. In any event, individuals dissatisfied with their present situation may adapt by changing career orientations or perhaps leaving the field. A consequence of not changing career orientation may be a low level of job and career satisfaction.

Our study included only those who were satisfied with their careers, or at worst, “toughing it out.” No attempt was made to identify those who resigned and their corresponding career orientation. To date, little is known about career orientation and resignation. An interesting study would be to examine resignees in order to develop a profile of those who do not adapt to any police related career orientation. It may be possible, for instance, that plateaued Careerists have a high resignation rate due to the frustration of not being promoted. Including those who resigned from policing or conducting a study solely on resignees would
make possible a more comprehensive theory of career orientation and career satisfaction.

Although Buckley et al. (1993) found no differences between level of education and desire for promotion, an important finding of our study is the need to consider officers’ career orientations in order to understand career aspirations. We indirectly found an education-promotion effect with respect to career orientation. A more highly educated group, Careerists, had a significantly greater desire for promotion than did the lesser educated Self Investors and Social Activists. Careerists also had higher career aspirations compared to the Self Investors and Social Activists, although, Enforcers who are also lesser educated also had high career aspirations. In Buckley et al.’s (1993) study, lesser educated officers overall had lower career aspirations. Enforcers and Careerists, therefore, may have different perspectives concerning the police role and as a consequence, different beliefs about what the appropriate qualifications are for police work and promotion. What this implies is that we must consider individuals’ career orientations before we examine their career aspirations and their attitudes toward promotion and police work in general.

**CONCLUSION**

The work of Walsh (1977), Cherniss (1980) and Burke and his colleagues (1984, 1986, 1987, 1988, 1989a, 1989b, 1989c, 1990a, 1990b) has tended to depict persons with different career orientations as different personality types, that is, a relatively static conception. Our approach is a less static one. We view career orientations as changing with the stages of one’s career, new life circumstances and with identification with different reference groups. Changes in career orientation over time are also linked to career aspirations and career satisfaction.

Our study of socio-demographic factors, reference groups, and the career orientations, career aspirations and career satisfaction of Canadian police officers has interesting implications for both further research and police policy development. Social changes including technological advances, economic and fiscal issues, immigration and human rights movements have led to changes in the socio-demographic characteristics of both the general population and new police recruits. This has led to increasing calls for new styles of policing which are technically sophisticated, cost-effective, community based and sensitive to the realities of a multi-cultural and multi-racial society.
To deal with such changes and demands, police departments have sought new recruits who better reflect the diversity of the population and have higher levels of formal education which presumably would help them to be more sensitive to community needs. Higher levels of education seem to be more congruent with certain career orientations (Careerists, Specialists, Social Activists). A problem, however, is that there is a bias in present police organizational structure and culture – both formal and informal – to reward certain career orientations more than others.

To the extent that police departments successfully promote the importance of higher education for officers, one might expect an increasing transition to more highly professionalised forces characterized less by a concern with traditional law enforcement (Enforcers and Self Investors) than by a human service orientation (Social Activists), technological advances (Specialists) and advancement into managerial ranks (Careerists). A greater emphasis on universities as reference groups may thus be a significant factor in the professionalization of policing.

Our experience has shown that senior officers in many police forces are strong traditionalists who tend to resist change. They perceive those who are change oriented, such as Social Activists, to be radicals, rebels or “shit-disturbers.” The conflict in attitudes, values and beliefs between traditionalists and change agents may hinder Social Activists from working effectively with the community and in establishing satisfying and fulfilling careers.

Our study suggests that an understanding of how career orientations are linked to socio-demographic factors, career aspirations, career satisfaction and the professionalization of policing is vital to an understanding of contemporary policing in North American society. Identifying career orientations of police applicants may have important ramifications in a police force’s ability to identify, hire and train appropriate recruits – those who are open to new and novel developments, and those who are less likely to stagnate. While a more detailed analysis of policy implications and an agenda for further research is beyond the scope of this paper, the following is just one example of the kinds of issues that can be raised. It relates to the question of job stress and burnout particularly among Social Activists.

Police departments who recruit university educated individuals need to take measures to reduce the resistance of senior officers and to establish a reward structure which is satisfying not only for Careerists and Enforcers (i.e. promotion), but for Social Activists who may be life-long constables. Police departments who do not give attention to the policy
implications of research on the career orientations of new recruits and established officers may end up with more Self Investors than their organization can tolerate.

NOTES

Questionnaire Career Orientation Descriptions

Self Investor  
I enjoy my career as a police officer, although, I ensure that there is a balance between it and my personal life. A major motivation in my career as financial security. Off the job interests such as family, personal interests and well being are a major source of pleasure for me. I do not want job demands to interfere with my personal life. I am not particularly striving for promotion.

Careerist  
I am interested in recognition and advancement in my police career. Prestige, respect and financial progress are important to me. I feel that I can make a worthwhile contribution at the managerial levels. I work hard at my job in order to make a good impression on superiors who might control the advancement of my career. I study hard for exams and seek out training or educational opportunities if I think they will help me get ahead.

Specialist  
I value the opportunity to do good work according to my own standards. I prefer jobs that provide challenge, new experiences and the development of my technical or specialized skills. Promotion and financial success are less important than the opportunity to be involved in work that interests me.

Enforcer  
I enjoy the enforcement aspect of police work. I feel a sense of excitement when pursuing a case. Gathering evidence and solving crimes is what policing is all about to me. I achieve a sense of satisfaction by apprehending criminals and obtaining convictions. Financial security is not what drew me to police work.
Social Activist  I feel that as a police officer, I am contributing to improving Canadian society. I feel that police work not only encompasses law enforcement but also includes a strong public assistance role, settling disputes, assisting victims, etc.). Personal status and job security are not my primary motivations. My major career motivation is to help people.

Handling Missing Data

For the 14 respondents (0.89 percent of the total sample) who misread the instructions and identified more than one orientation as primary, we treated the data as missing. Tabachnick and Fidell (1989) consider deciding how to handle missing data as a problem of making the best possible decision among several bad alternatives. They discuss four possible alternatives.

The first two, missing data correlation matrices or treating data as a response itself (i.e. treat the non-response as a response and code it as such) are inappropriate for our data. The third method, deleting cases containing missing data may adversely affect sample size and affect subsequent analyses. The fourth method, which we chose, is to use a procedure to estimate missing data.

We conducted a discriminant analysis using a number of predetermined predictor variables (police force, education, present assignment, desire for promotion, desired rank, probability of reaching expected rank) to identify which career orientation best fit each respondent at the present time.

Discriminant analysis (DISCRIM) is a statistical technique used to predict group membership. First a classification equation is developed for each group (career orientation) using the predictor variables. Data for each case (i.e. each respondent) are then inserted into each classification equation to develop a classification score for each group for the case. The case is assigned to the group for which it has the highest classification score.

Bias may enter classification if the coefficients used to assign a case to a group are derived, in part, from the case. To deal with such bias, we used a method known as jackknifed classification which involves leaving out data from the case when the coefficients used to assign it to a
group are computed. Each case has a set of coefficients that are developed from all other cases. Jackknifed classification gives a more realistic estimate of the ability of predictors to separate groups.

We evaluate the overall statistical reliability in DISCRIM using Wilk’s Lambda criterion. If Wilk’s Lambda indicates that the predictors used are statistically significant, we can be at least 95 percent confident that the prediction equation derived from DISCRIM is reliable and can classify the cases better than chance alone. In this study, Wilk’s Lambda = 0.578, with p < .0001.

Because DISCRIM assumes that the sample we are dealing with is normally distributed and prediction equations are computed on this basis, the method is likely to produce some errors or misclassification of cases. Normally we would simply accept the classification score provided by the DISCRIM procedure and use it to replace the missing case with the knowledge that there may be some error. In our study, however, the cases identified with missing career orientation scores were not truly missing. The respondents did not leave the career orientation question blank, but instead identified more than one as primary. This afforded us the opportunity to check the accuracy of the prediction equations computed by DISCRIM by comparing the classification score with the multiple response given by the respondents.

If the career orientation predicted by the discriminant analysis was one of the first rankings indicated by the respondent, we assigned that career orientation to that particular respondent. When this procedure did not predict one of the respondent’s first rankings, the case was deleted. Through this procedure, we were able to successfully identify career orientations for 86 percent (11) of the missing cases. When we re-analyzed the means and standard deviations of the predictor variables used, there were no differences between the sample using the missing data and the sample using interpolated data. Also, the proportion of respondents in each career orientation before and after was not affected. This procedure allowed us to make a conservative estimate of career orientation and to increase our sample size for statistical analyses. We could not, however, predict career orientation upon joining since this was based on retrospective data and our predictors were concerned with present career orientation. Therefore, when analyses of career orientation on joining the force were conducted, cases with missing data were deleted.
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